3M COMPANY

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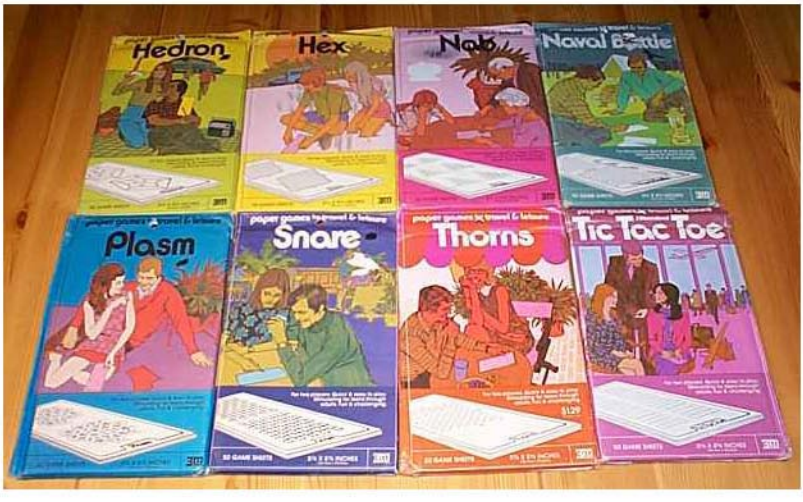
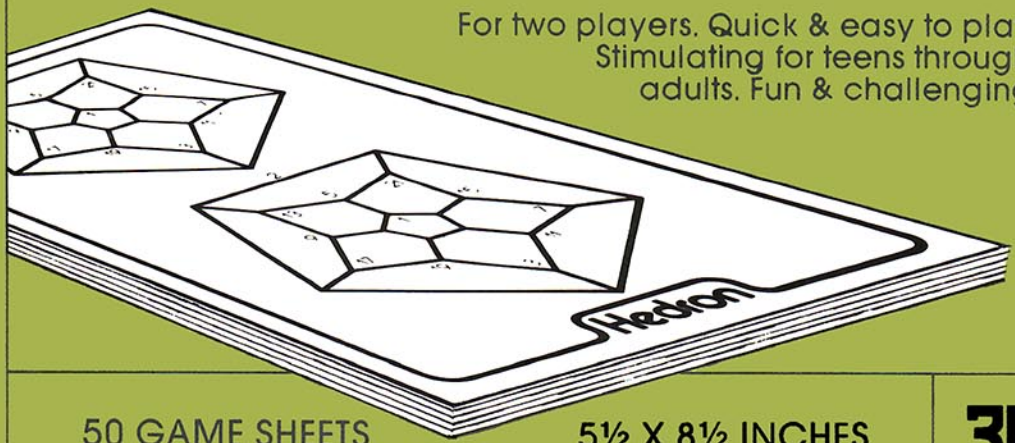


Hedron, Hex, Nab, Naval Battle, Plasm, Snare, Thorns, and Tic Tac Toe 3D

paper games for travel & leisure

Hedron

For two players. Quick & easy to play.
Stimulating for teens through
adults. Fun & challenging.



50 GAME SHEETS

5½ X 8½ INCHES
139.7mm x 215.9mm

3M COMPANY

Hedron

For two players.

A geometric capture game.

Object

To place your mark on 3 or more sides of a five-sided figure, thus earning the point value for that figure.

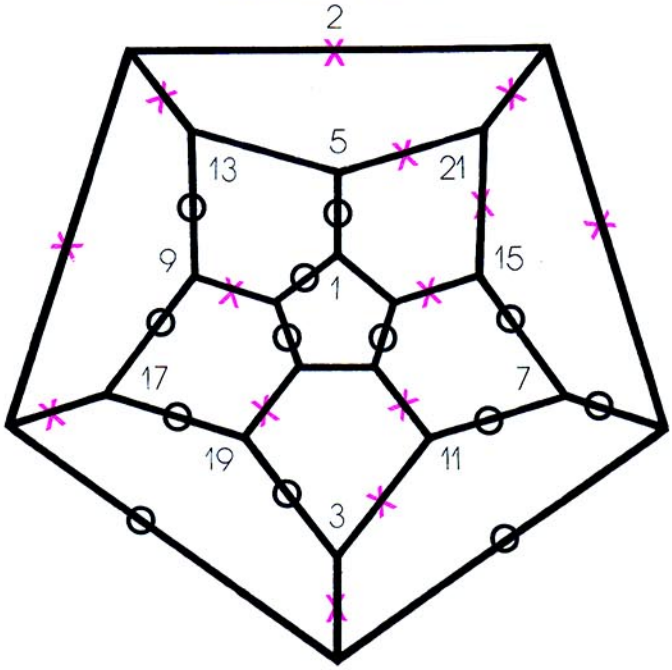
How to play

Players mark "X" or "O" on any of the sides of the 12 five-sided figures.

Winner

Player who reaches 62 points or more.

Sample Game



"X"	"O"
9	19
15	7
3	17
5	11
2*	13
21	1
Total 55	68

"O" wins

*Note: "X" gets 3 sides of border earning him 2 points.

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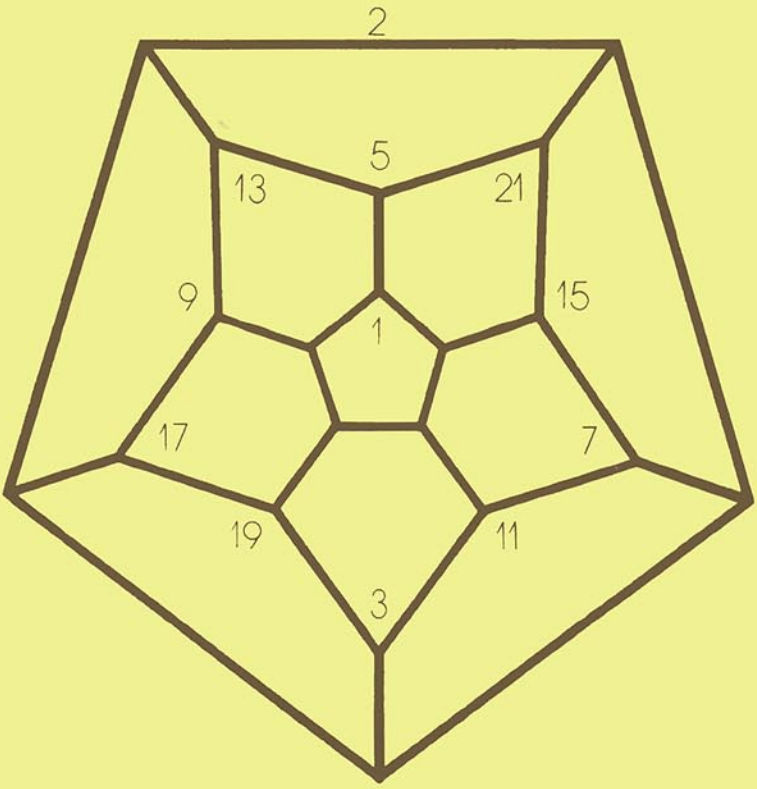

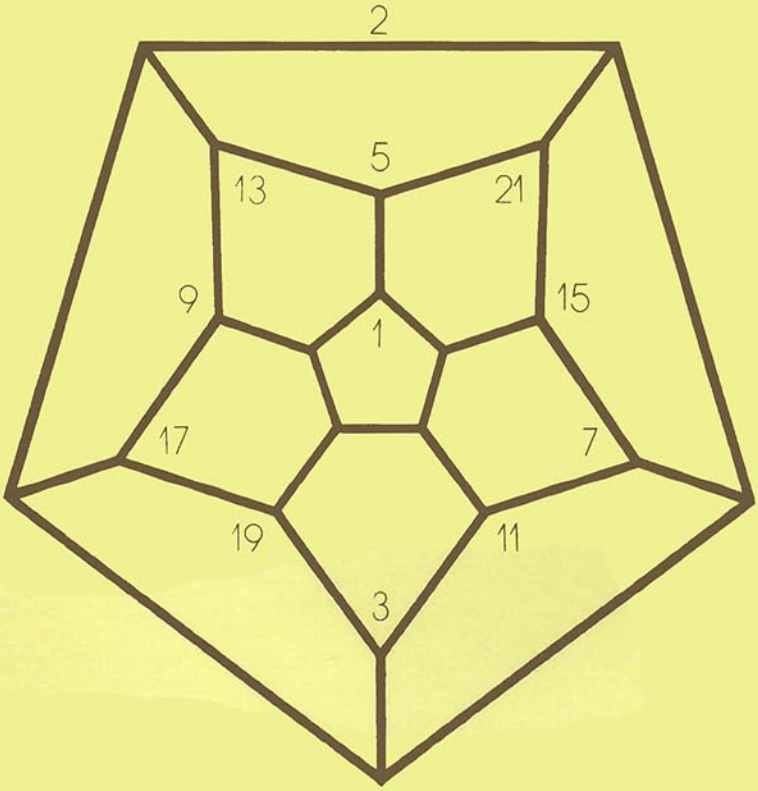

Hedron

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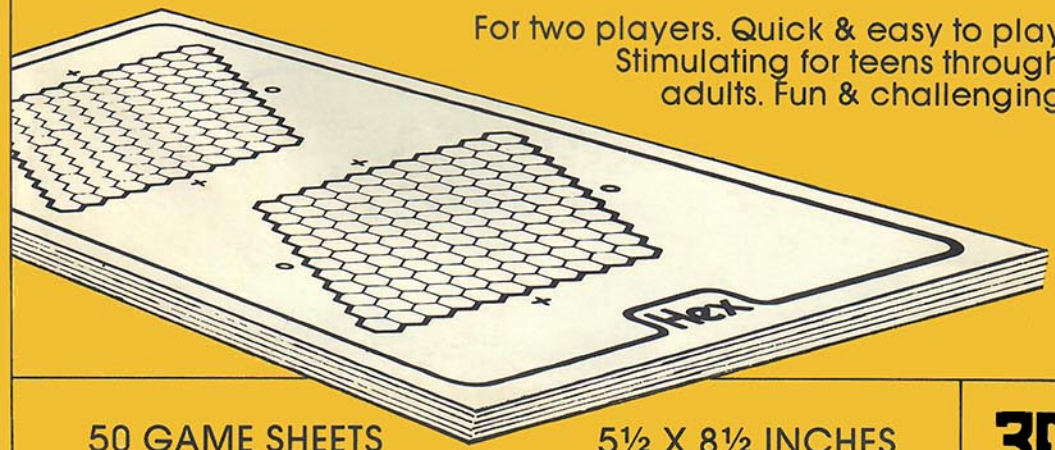
Hex

For two players. Quick & easy to play.
Stimulating for teens through
adults. Fun & challenging.



50 GAME SHEETS

5½ X 8½ INCHES
139.7mm x 215.9mm

3M COMPANY

Hex For two players.

A fascinating game of pathways and barriers.

Object

To establish a continuous path connecting opposite sides of the board.

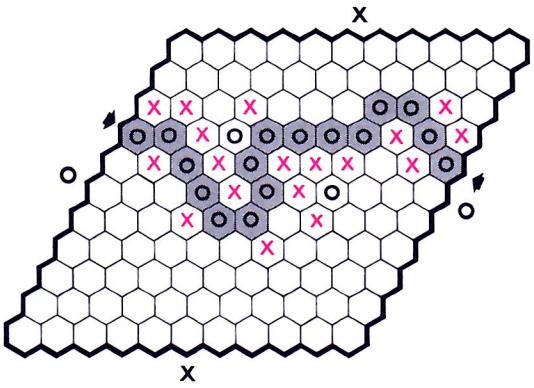
How to play

Players mark "X" or "O" in hexagons anywhere on the board. Following moves do not have to connect with previous moves.

Winner

First player to connect his sides of the board.

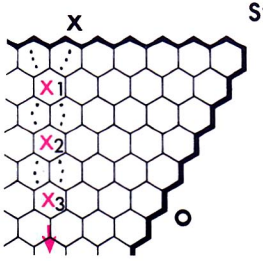
Sample Game



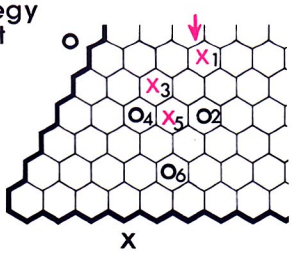
"O" WINS by being the first to connect his borders.

Note: Arrows mark ends of continuous path with shading added to help follow the winning path.

Strategy Hint



Basic Offensive Move
This move allows player to cover largest area with the fewest moves. Dotted lines indicate possible connections on future plays. Numbers represent successive moves by "X."



Basic Defensive Move
This triangle formation allows "O" to stop "X's" attack by turning him away from his border. Numbers represent successive moves.

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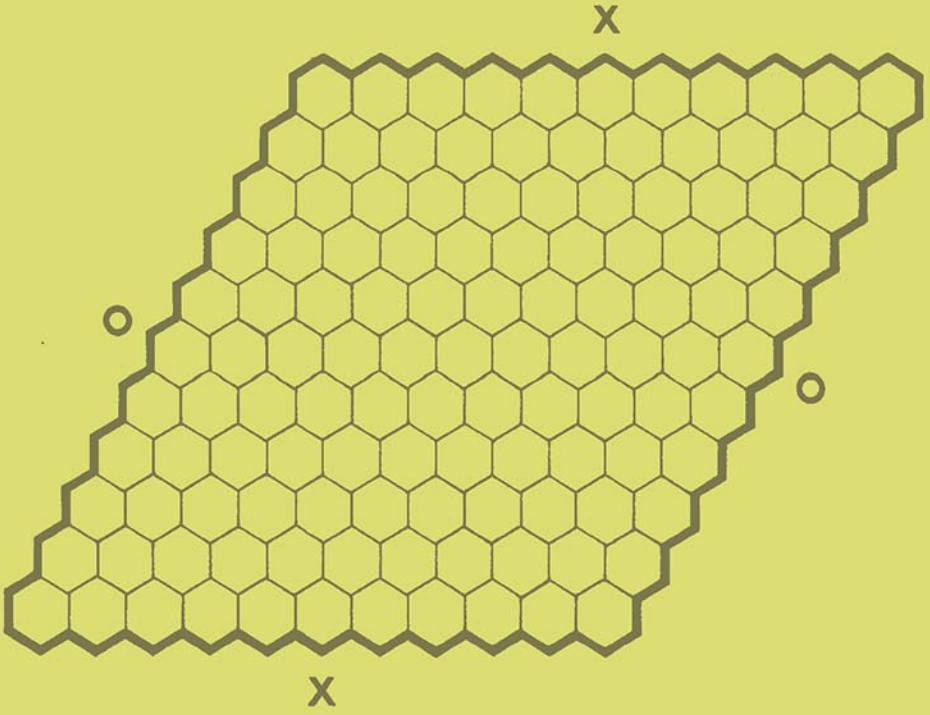

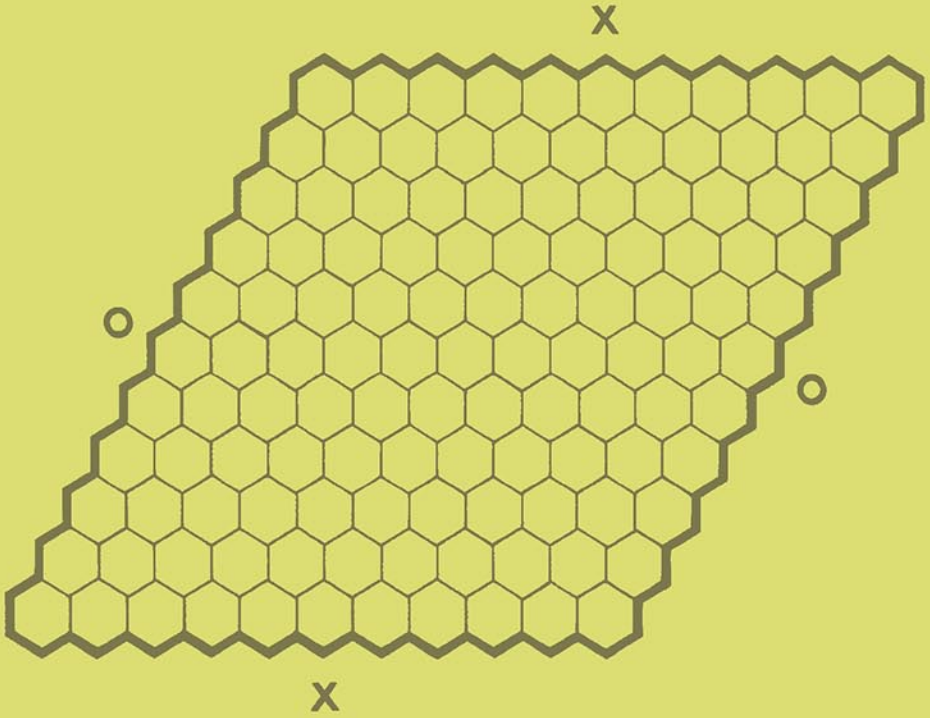

Hex

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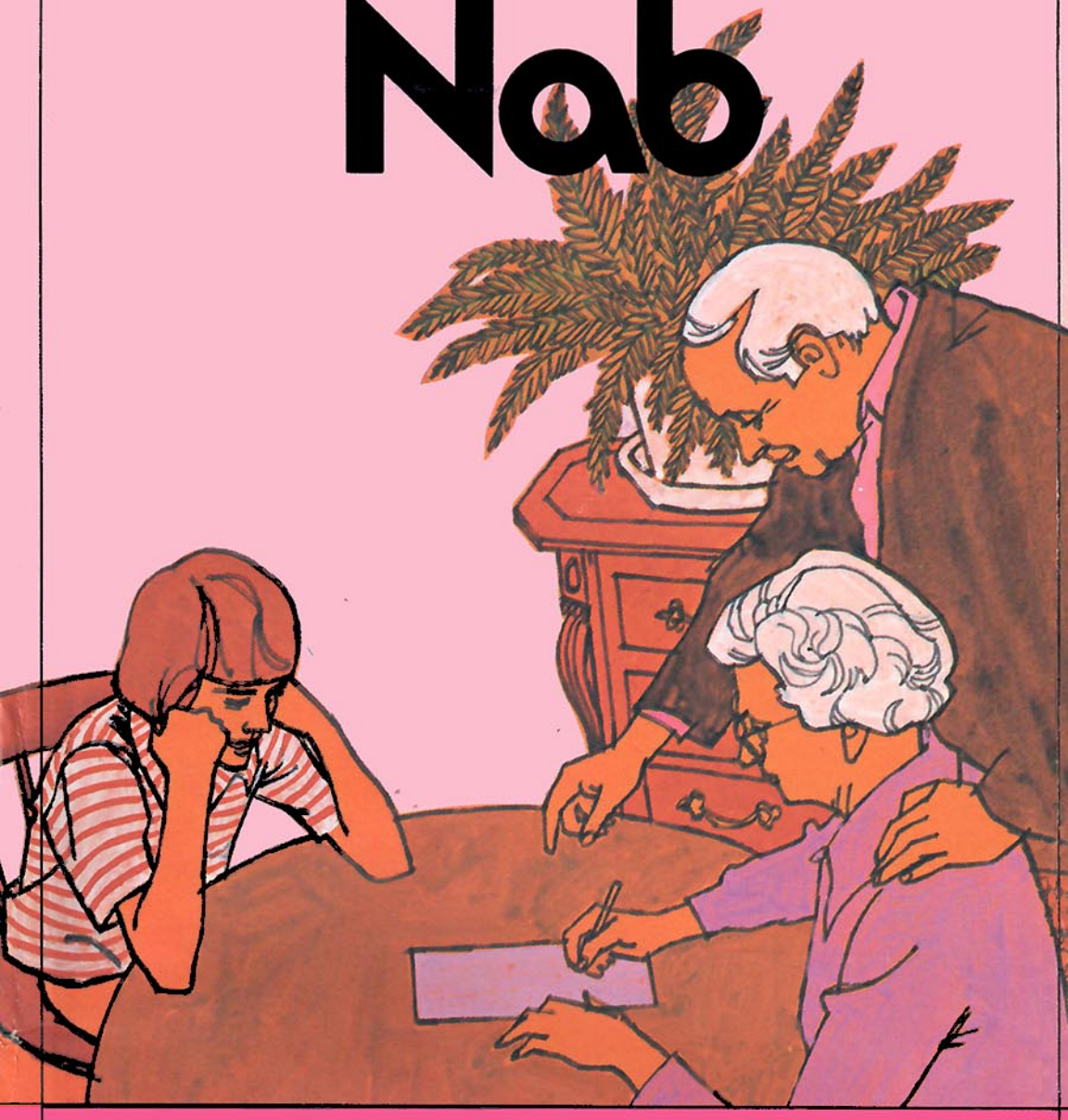
Nab



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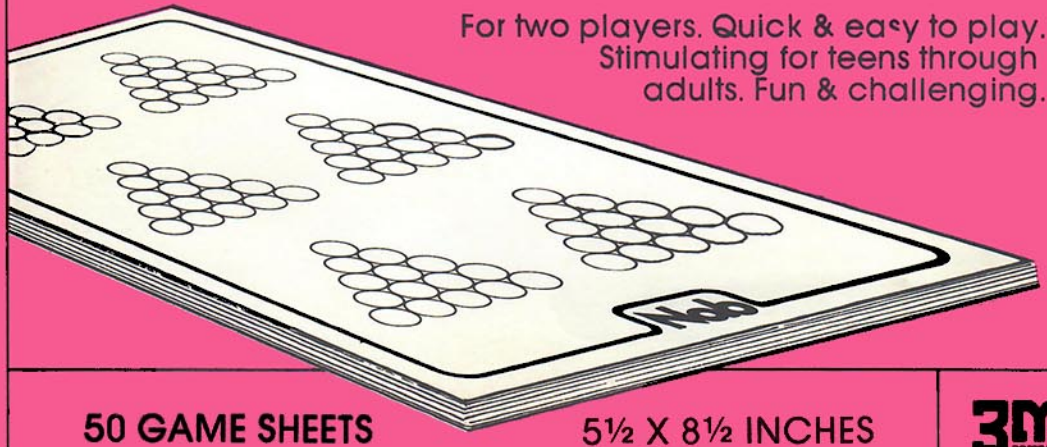


50 GAME SHEETS

5½ X 8½ INCHES
139.7mm x 215.9mm

3M COMPANY

Nab

For two players.

A calculating pyramid game.

Object

Cross out key circle combinations to win.

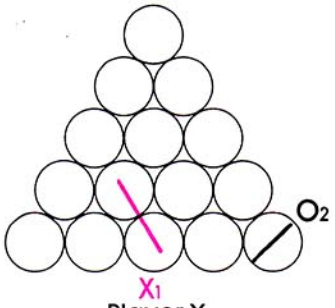
How to play

Players cross out from one to five circles per move. Those circles crossed out in one move must lie in a straight line and be connected.

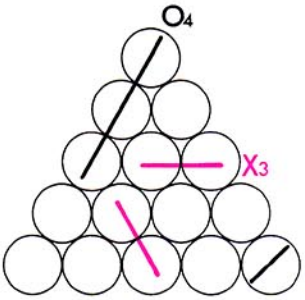
Winner

Winner must force opponent to cross out the last circle.

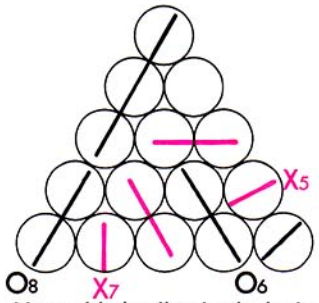
Sample Game



Player X plays first.



At O_4, O has a winning combination



X must take the last circle and thus loses.

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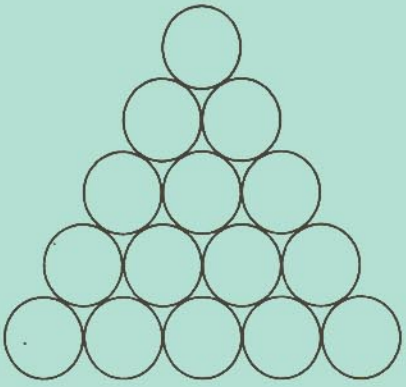

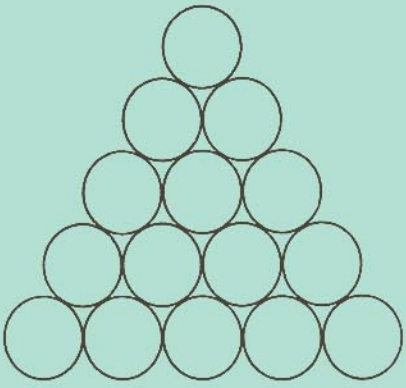

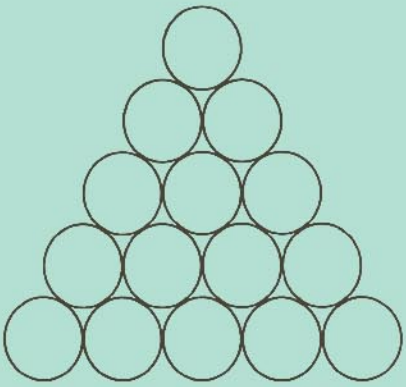

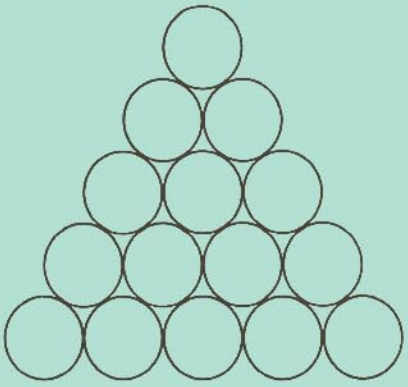

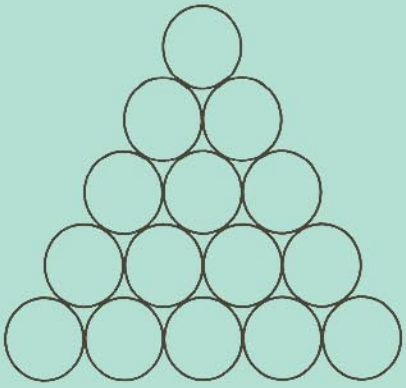

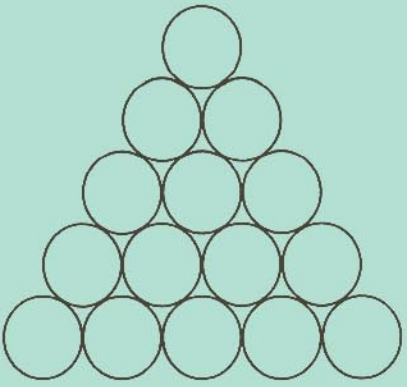

Nab

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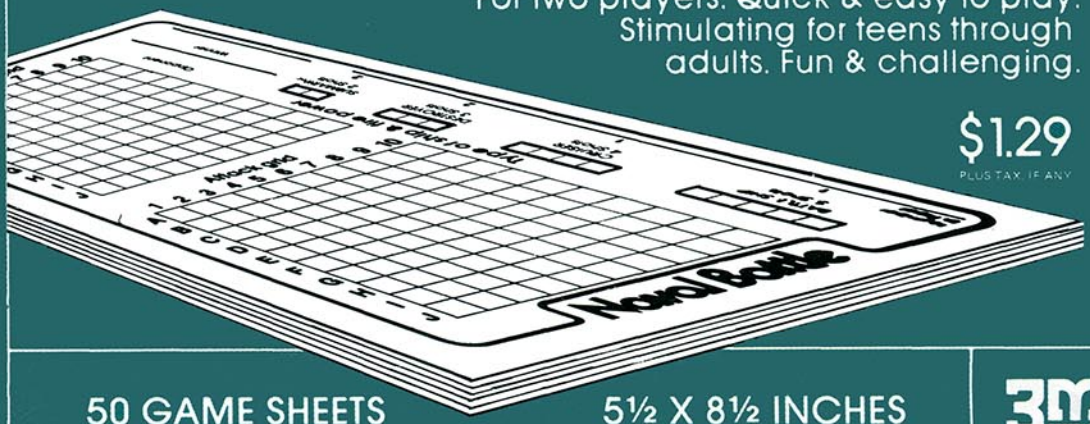
Naval Battle

For two players. Quick & easy to play. Stimulating for teens through adults. Fun & challenging.



$1.29
PLUS TAX, IF ANY

50 GAME SHEETS

5½ X 8½ INCHES
139.7mm x 215.9mm

3M COMPANY

Naval Battle

For two players.

A tactical game of survival.

Object:

To sink your opponent's entire fleet—one Battleship, one Cruiser, two Destroyers and two Submarines.

How to play:

Each player secretly deploys his fleet on the top grid of his sheet, positioning each ship by outlining the required squares either horizontally or vertically.

On his turn, attacking player fires a salvo of shots equal to the fire-power of his largest unsunk ship. To fire, he marks (dots) a square on his attack grid and calls out its letter-number location to the opponent who marks an "X" (hit) or "O" (miss) on the corresponding square of his deployment grid. When entire salvo has been fired, opponent reports all hits by location and type of ship and attacker marks them on his attack grid using fire-power numbers for identity (see Sample Game). Each ship retains its full fire-power until all of its squares have been hit—and opponent reports it has been sunk!

Winner:

First player to sink his opponent's fleet wins the battle!

Sample Game (Winner's play sheet)

Deployment grid

	1	2	3	4	5	6	7	8	9	10
A				O		O				
B		O			O				O	
C	O		O					O		
D	O				X			O	X	X
E	O		O		X					O
F	O				X		O			O
G	O			O	X					
H	O	O	X	X	X	X	X		O	
I		O						X	X	O
J	O			O		O		O	O	

"X's" show 13 hits by opponent, sinking winner's Battleship, Cruiser and both Submarines. On his last turn, winner could fire only 3-shot salvos (fire-power of unsunk Destroyers).

Attack grid

	1	2	3	4	5	6	7	8	9	10
A			•			•		•	3	•
B	4	4	4	4	•		•		3	
C			•		•	2			3	
D		•		•		2	•			
E			•		•	•				
F	•			5	5	5	5	5	•	•
G		•								
H		3	•			•		•	•	
I	•	3	•	•	•		2	2	•	
J		3	•		•			•		

Dots show 49 shots fired at opponent's fleet. Use of fire-power numbers to indicate hits automatically identifies type of ship. Example: The 5's (F-4 thru F-8) identify the opponent's Battleship.

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Deployment grid

	1	2	3	4	5	6	7	8	9	10
A										
B										
C										
D										
E										
F										
G										
H										
I										
J										

Attack grid

	1	2	3	4	5	6	7	8	9	10
A										
B										
C										
D										
E										
F										
G										
H										
I										
J										

Opponent

Winner

Type of ship & fire power

Number in Fleet		
1	BATTLE SHIP 5 Shots	
1	CRUISER 4 Shots	
2	DESTROYER 3 Shots	
2	SUBMARINE 2 Shots	

Naval Battle

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Plasm

For two players. Quick & easy to play.
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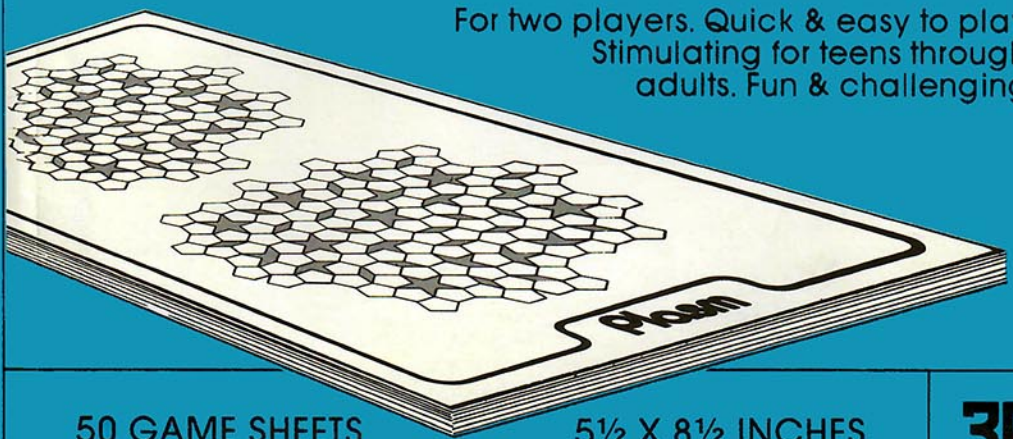


50 GAME SHEETS

5½ X 8½ INCHES
139.7mm x 215.9mm

3M COMPANY

Plasm

For two players.

A spreading, surrounding, swallowing game.

Object.

Players score by surrounding the shaded areas of the board.

How to play

Players start by marking an "X" or "O" in one pentagon anywhere on the board. Each player's move, thereafter, must be adjacent to one of his previous moves. If a player uses all of his adjacent pentagons, he may play anywhere on the board; however, his following moves must be in adjacent pentagons. The use of different colored pencils is recommended.

Scoring

Players keep track of scores by initialling the shaded areas with "X" or "O" as they are surrounded. Both players' marks may border on a shaded area but only the player who finishes surrounding the area gets the score.

See Diagram 1.

Diagram 1

Score = 5

Score = 3

Score = 2

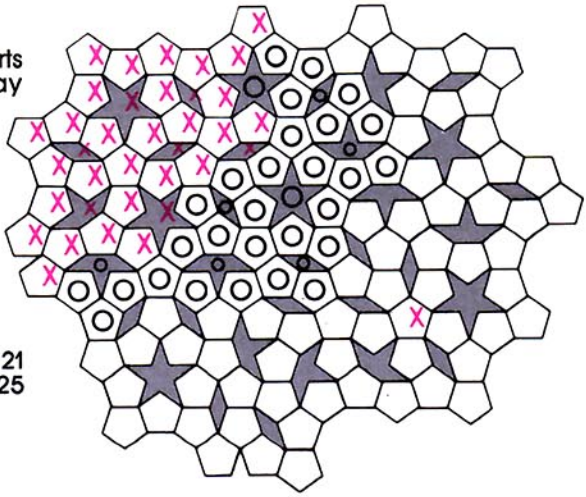
The asterisks indicate the pentagons needed to surround each area.

Winner

The player who scores 51 or more points.
Total number of points — 101.

Sample Game

"X" starts
"O" to play



Score "X" 21
"O" 25

"X" Has just run out of pentagons and has made a new start in open territory.

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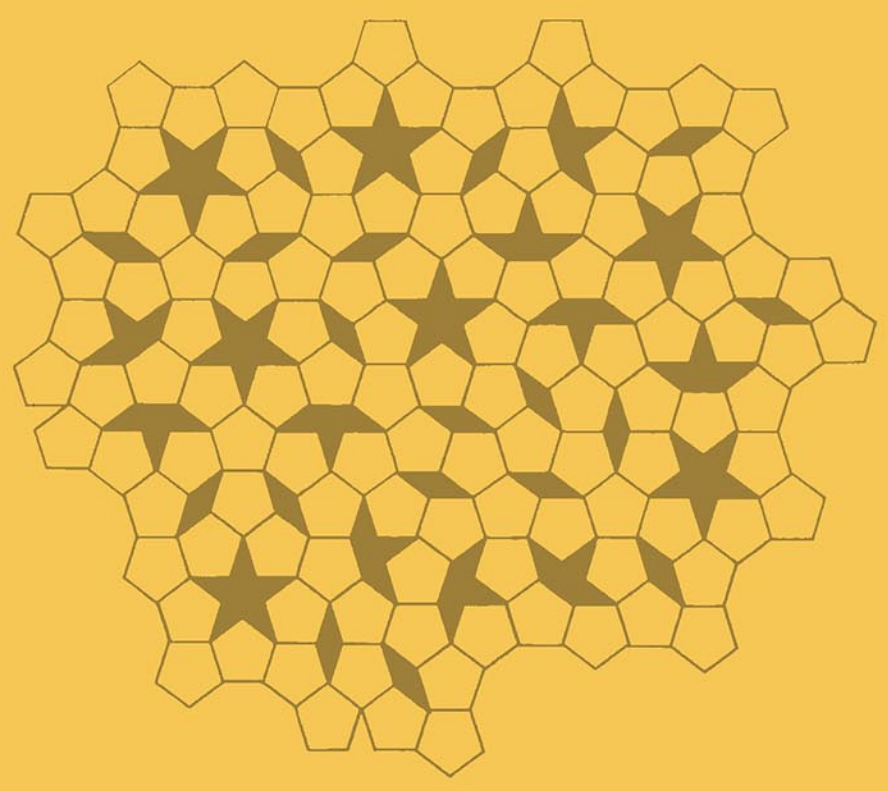

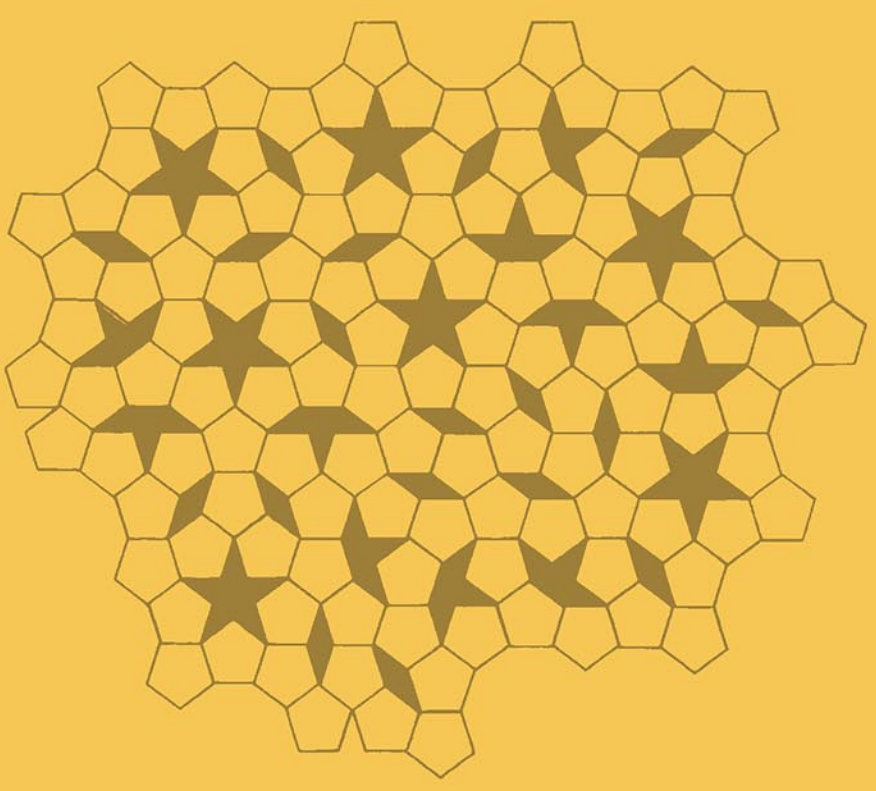

Plasm

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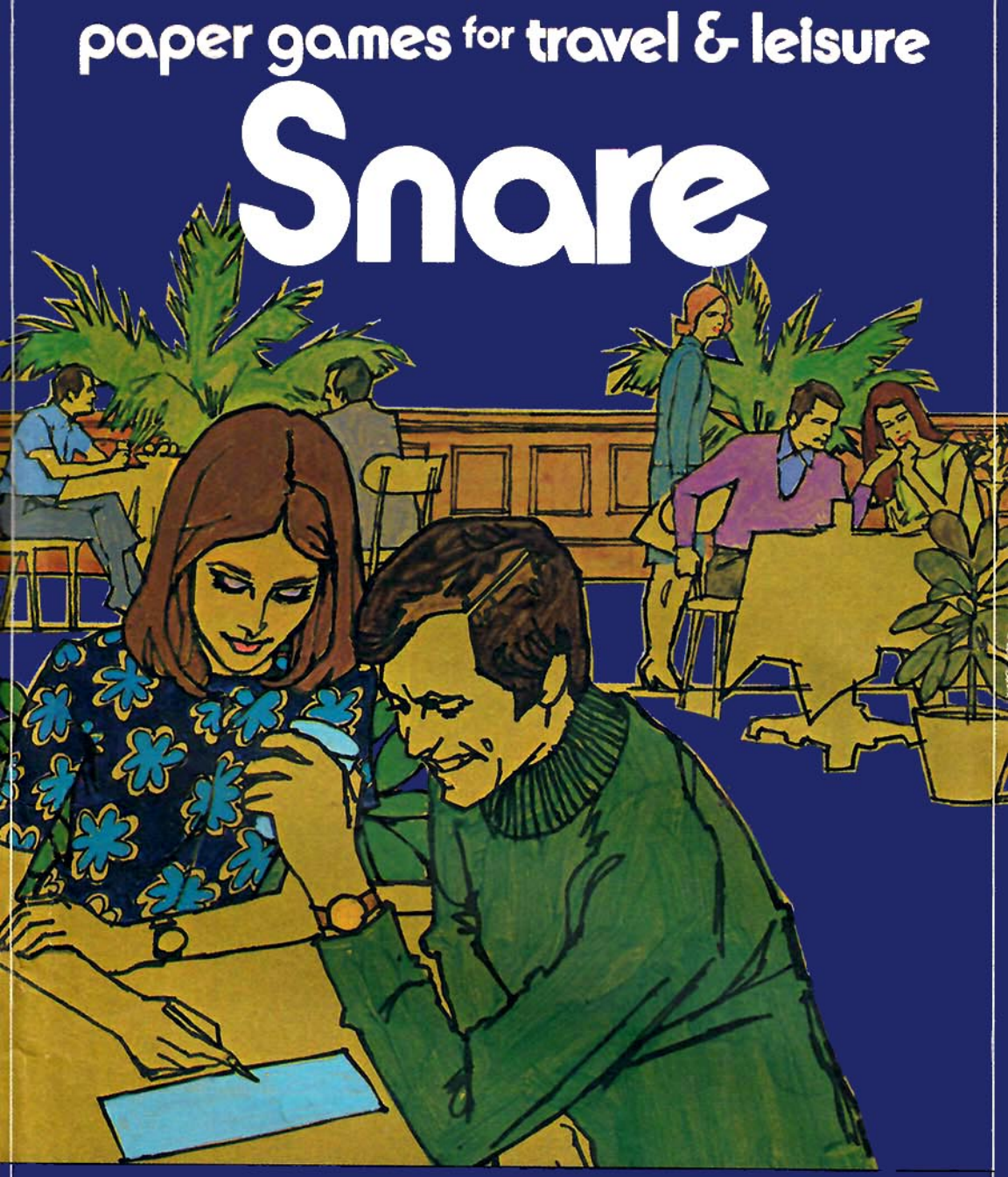
Snare



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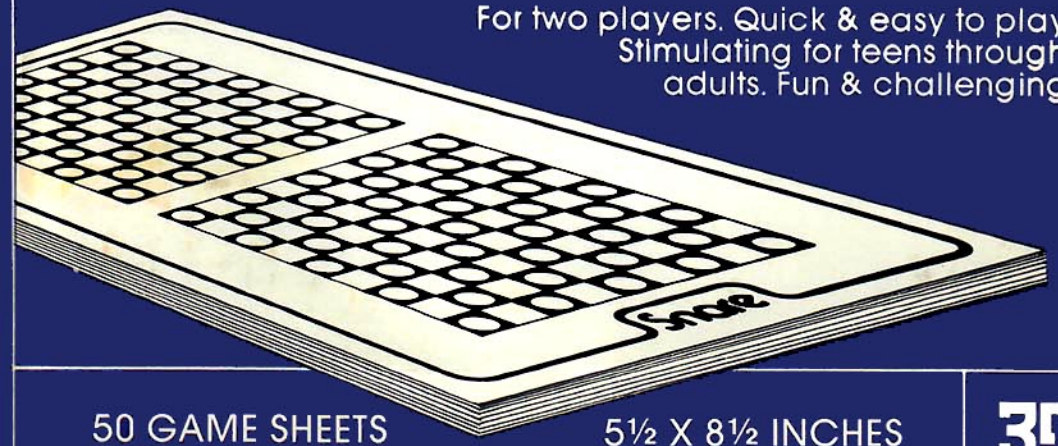


50 GAME SHEETS

5½ X 8½ INCHES
139.7mm x 215.9mm

3M COMPANY

Snare For two players.

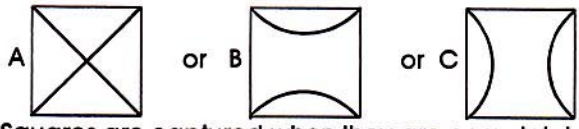
A game of lines and loops.

Object

To capture the most shaded squares.

How to play

With each turn the player has a choice of making one of three moves in any un-shaded square on the board:



Squares are captured when they are completely enclosed by the lines produced by BOTH players' moves or edge of playing board. See Diagram 1. The player making the capture puts his "X" or "O" mark inside of the square. More than one shaded square may be captured with one move. Play continues until all un-shaded squares have been used.

Winner

Player with the most shaded squares wins.

Strategy Hint

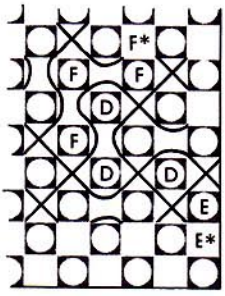
The use of more "A" moves leads to a more conservative game with scores likely to be close.

Diagram 1

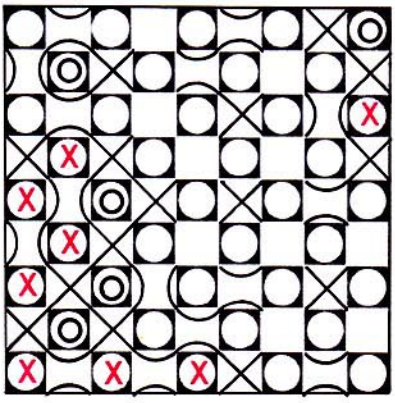
Squares marked D have been captured.

Square marked E can be captured by the proper move at E*.

Squares marked F can all be captured by the proper move at F*.



Sample Game



Game in progress: It is "X's" turn to move and the score is "X" 8 and "O" 5.

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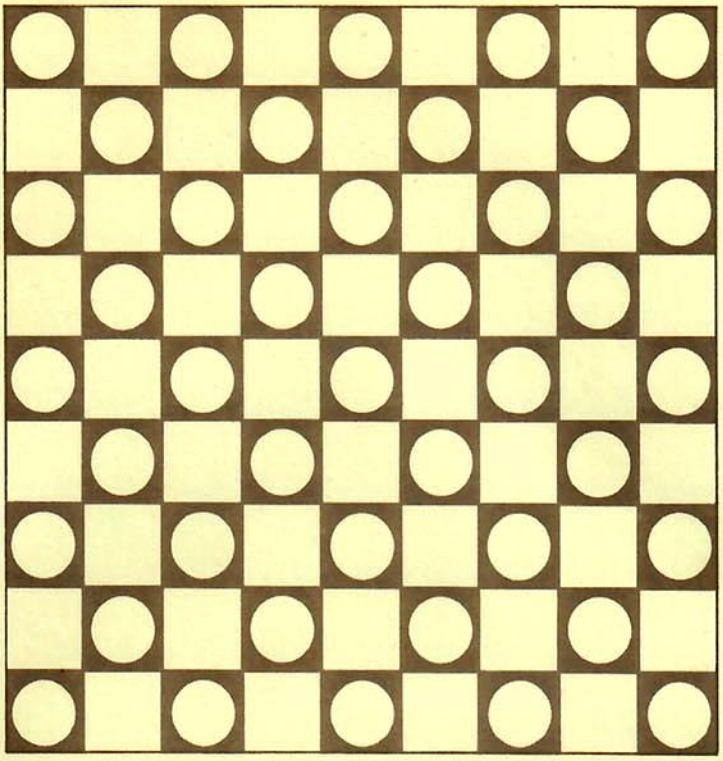

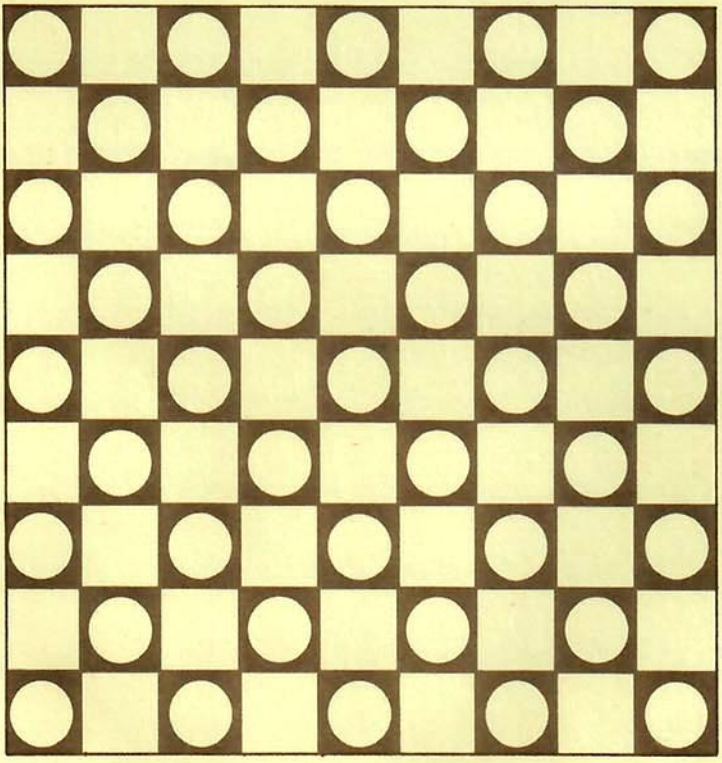

Snare

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paper games for travel & leisure

Thorns

For two players. Quick & easy to play.
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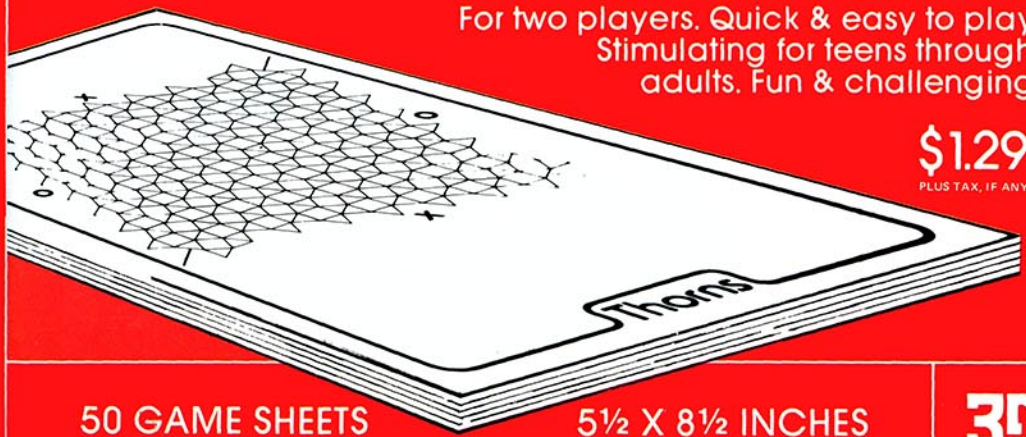
PLUS TAX, IF ANY



50 GAME SHEETS

5½ X 8½ INCHES
139.7mm x 215.9mm

3M COMPANY

Thorns For two players.

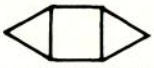
The prickly path game.

Object

To build a continuous path from one side of the board to the other. Each end of the path must occupy a shaded triangle.
Note: The corner shaded triangles indicated by a line can be path ends for either player "X" or "O."

How to play

A move consists of marking a line through any thorn shaped area on the board and initialing with either "X" or "O." The use of different colored pencils is recommended. All moves must be of the shape shown below.



Thorn shaped area

"X" move

Moves

A player's move connects his path of thorns if they touch at a side, a point or overlap. You **cannot** overlap an opponent's thorn.

Touch at a point

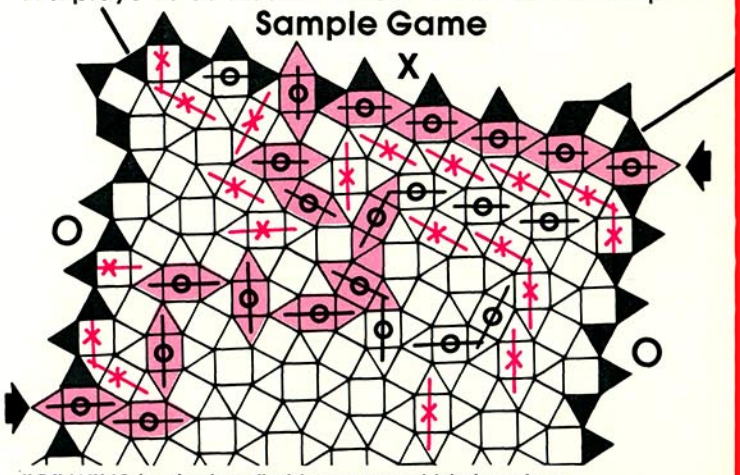
Overlap

Touch at a side

Winner

First player to connect his borders with a continuous path.

Sample Game



"O" WINS by being first to connect his borders.
Note: Arrows mark end of continuous path with shading added to help follow the winning path.

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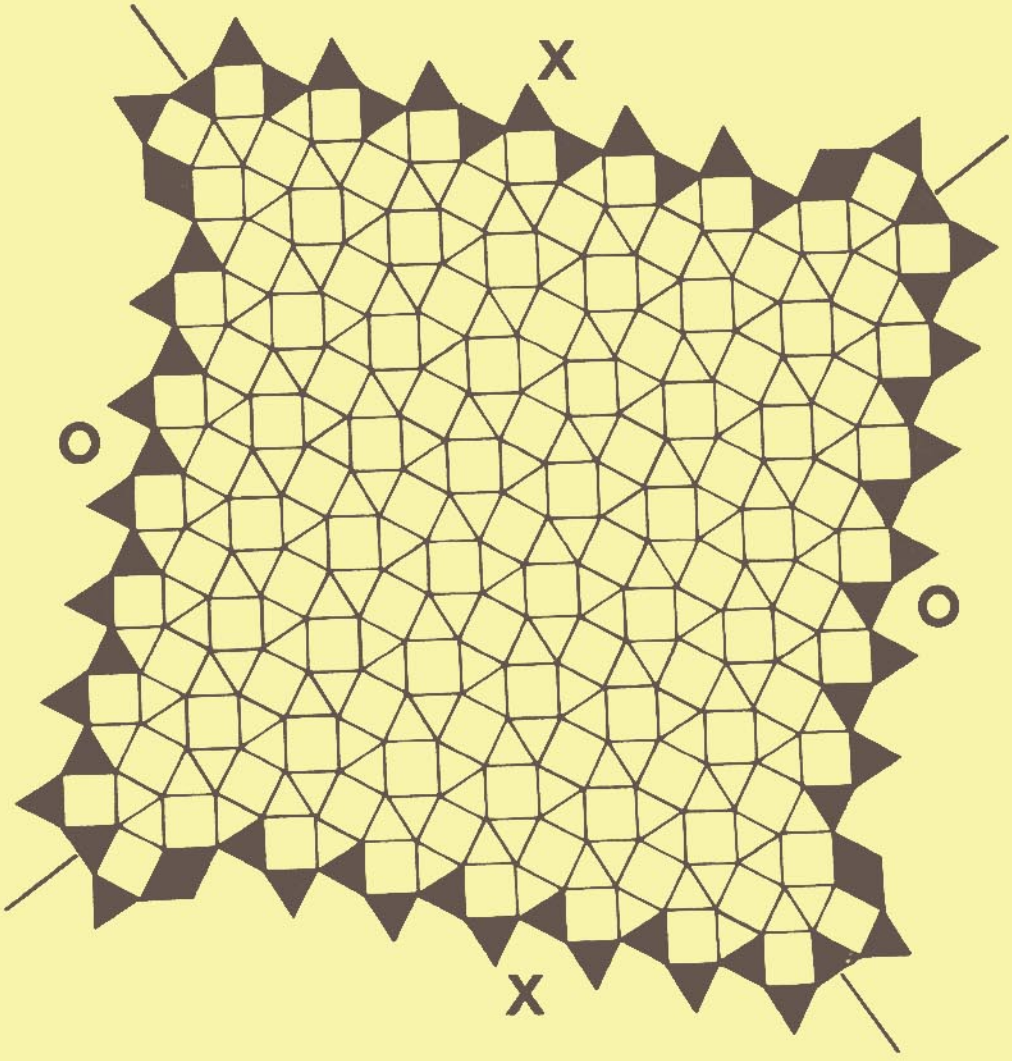

Thorns

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paper games for travel & leisure

3 Dimensional

Tic Tac Toe

For two players. Quick & easy to play.
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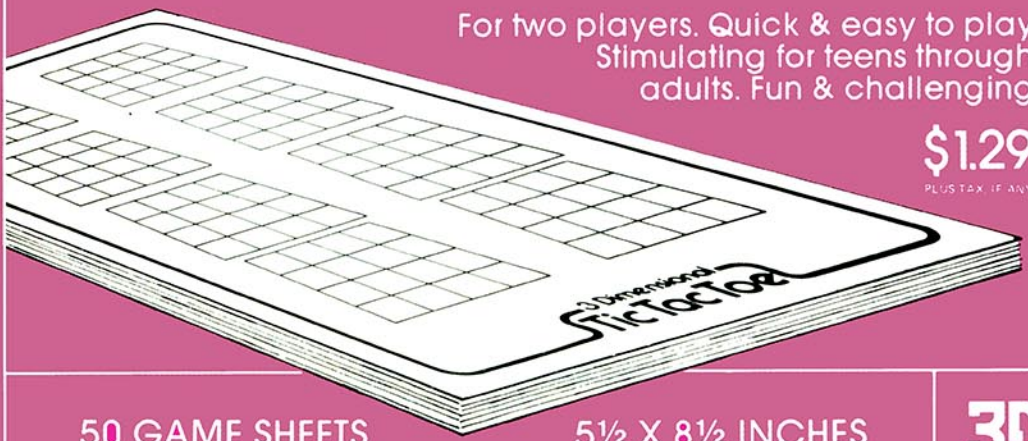

50 GAME SHEETS

5½ X 8½ INCHES
139.7mm x 215.9mm

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3 Dimensional

Tic Tac Toe

For two players.

An old game with an added dimension.

Object

To be first player to get 4 in a row.

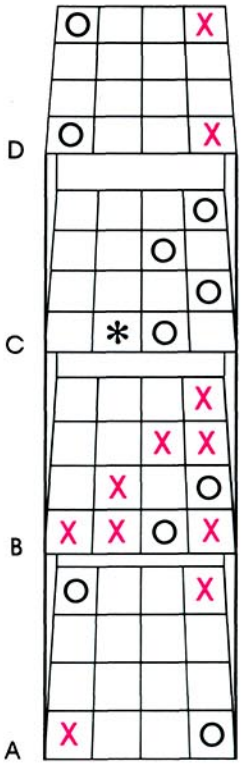
How to play

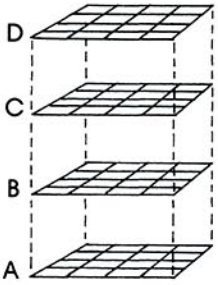
Players mark "X" or "O" in any one of the small squares on any of the four levels.

Winner

Player who gets four marks in a row either horizontally, vertically or diagonally in any direction.

Sample Game





"X" wins with diagonal play on level B preventing "O" from winning on his next turn with a play marked by the asterisk.

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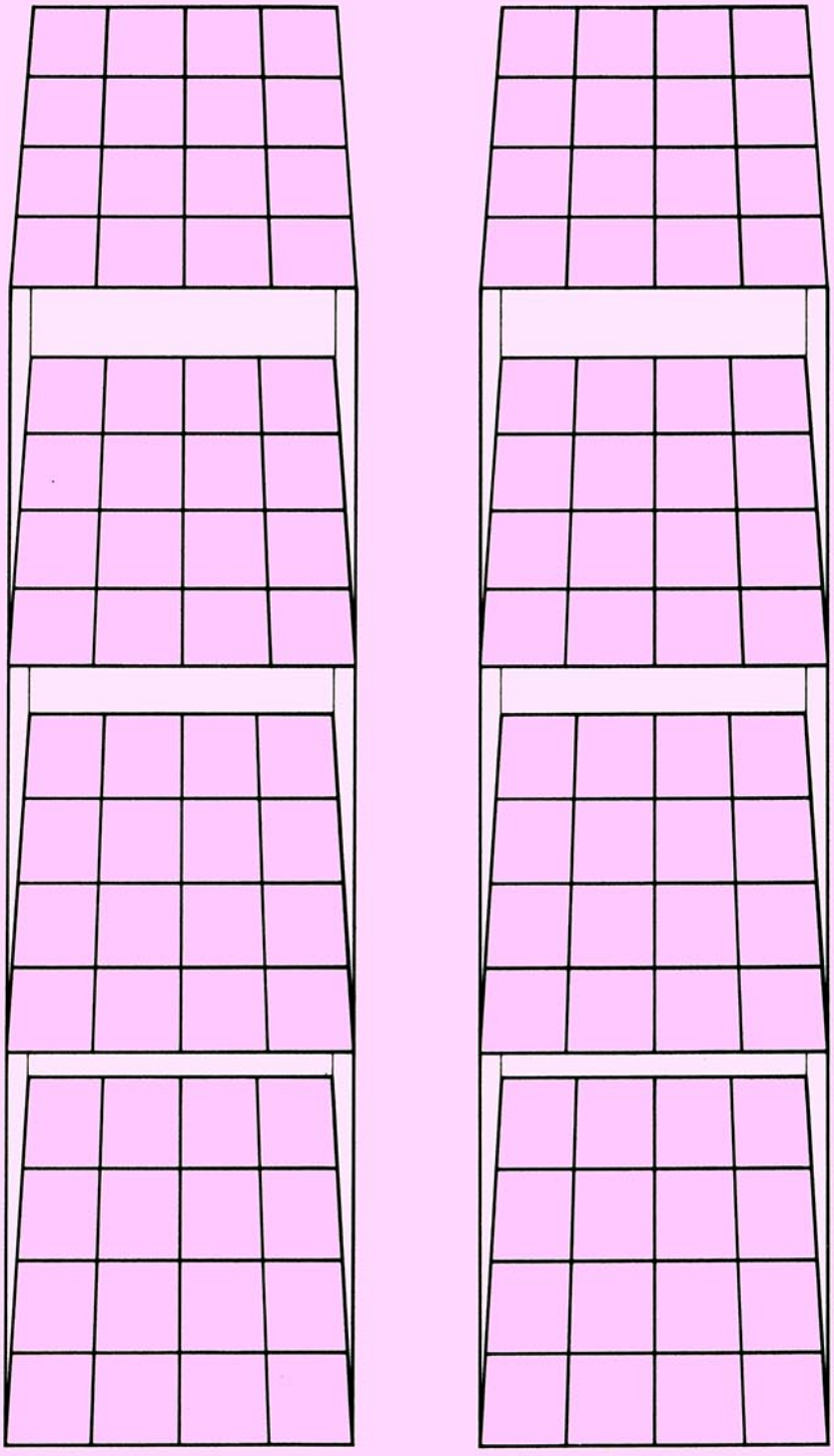

3 Dimensional Tic Tac Toe

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